


Medusa

Fusing Contemporary Art and Science

Using artistic film of Coral to explore how linked patriarchal, colonial, and capitalist systems oppress women and ecological foundation species

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An underwater photograph showing sunlight rays filtering through the water, creating a serene and ethereal atmosphere. The water is a deep blue-green color, and the light rays are visible as bright, diagonal streaks. The bottom of the frame shows a rocky seabed covered in marine life.

Medusa is a film by Kalie Granier an interdisciplinary California-based French artist and Co-founder of Loud Spring, an Ecofeminist Art Tank of Actions & Ideas, based in San Francisco.

In collaboration with Thierry Perez CNRS scientist, David Gruber marine biologist , NOAA (National Oceanic and Atmospheric Administration), Jorge Bachmann sound designer, Elise Rigot designer, Martin Giraud time-lapse, Damien Golbin drone images and Stephanie.

Project Background

Medusa is a project based on the reinvented **Greek myth of Gorgon Medusa** inspired from a legend of the ancient Mediterranean world.

This project combines a dialogue from a Native American woman and an ancestral voice from a Mediterranean legend to reinterpret the Greek myth of Gorgone Medusa who created Coral in the sea. With coral images from Marseille, France) this new narrative demonstrates the social-ecological power of living things as coral and women. « This legend was used to explain how coral in the sea was made. Perseus, after decapitating Medusa's head, washed his hands, and to safeguard the head, it was laid down on some seaweed on the rocky shore of the Sea. The gorgon's blood was spilled on to the seaweeds, and the mysterious power of the head metamorphosed the affected seaweeds into hard coral. » (Journal of Applied Phycology – 2020).

This film installation explores a new narrative of the metamorphosis of human into nonhuman, a return to the sea through the power of seaweed. Metaphorically this marine myth creates connection between the witch/healer, a rejected woman who recreates life despite her persecution. **This version reexamines the history from the perspective of living things. A momentum to create an Aware Responsibility of all forms of life and their interdependence** or a «Response-Ability» according to Donna Haraway in her book *Staying with the Trouble*.



PHOTO CREDIT: KALIE GRANIER

Gorgonian - Mediterranean

Gorgonians (*Paramuricea clavata*) are an order of soft corals that belong to the large group of Cnidaria, which also includes hard corals, sea anemones, jellyfish and many other species. Gorgonians colonise the seabed all over the world, from shallow coastal areas to deep sea canyons, temperate and tropical areas to polar zones.

Gorgonians' skeleton can be soft or rigid, horny or calcareous. These organisms can form dense communities that structure the seabed, constituting **“animal forests”** offering a refuge to a myriad of marine species.

Purple gorgonian beds, like those of other gorgonians, are fragile and vulnerable to human activities in coastal areas. In the Mediterranean, these populations are also regularly affected by the impact of climate change.

Fishing nets and anchors can tear off the fragile colonies or cause injury (necrosis) to the living tissue covering their horny skeletons. Creatures that live on top of other organisms – known as epibion organisms – then proceed to colonise the beds' exposed areas, threatening the colony's survival.

Excessive input of sediment in marine environment – referred to as hypersedimentation and linked to coastal constructions and the changes of the courses of rivers – is also a threat to the populations of gorgonians.

Human activities in the coastal area are not the only danger faced by gorgonians. In recent decades, **climate change** has caused the strong wind on the Provençal coast known as the Mistral to weaken during increasingly long periods. This, in turn, has provoked thermal anomalies in the water column.

The result of this is the submergence of the surface **warm water layers** (temperature >22 °C) for stretches of several weeks. The latter can be fatal to the gorgonian populations, which are usually exposed to cooler temperatures (around 13 to 15 °C).

In 1999, a vast thermal anomaly affected gorgonian populations in the western Mediterranean stretching from Spain to Italy. Apart from gorgonians, about 20 other species (sponges, bivalve molluscs, bryozoans, ascidians) were also affected. The anomaly was characterised by the presence of a column of warm water (23 to 24°C) at a depth ranging from 40 to 60 metres for a month. Other events of this type were then observed in 2003, 2006 and 2009, affecting the gorgonians to a greater or lesser extent.

Factors such as the gorgonians' genetic makeup or microbiota will dictate how they fare in the face of heat stresses. In the coming decades, significant climatic changes are expected to impact upon these species' location and distribution.

The study of deep-sea gorgonian populations is a major area of research in the years to come, not only to initiate appropriate protection measures, but also to better understand their connections with the populations inhabiting the sea's shallower depths.

Author; Stéphane Sartoretto: Chercheur en écologie marine (écosystèmes benthiques méditerranéens de substrat dur), Ifremer.

The Conversation: *Inside the Mediterranean sea's 'animal forests': an encounter with the gorgonian corals*. Published: March 30, 2022 2.11pm EDT. (<https://theconversation.com/inside-the-mediterranean-seas-animal-forests-an-encounter-with-the-gorgonian-corals-180194>)



PHOTO CREDIT: THIERRY PEREZ - CNRS

Project

Since 2016, I have developed an intimate connection to the marine environment, specifically to the plant world thriving within it. **I worked closely with scientists to create this film. However, I work from an artistic perspective rather than a conventional scientific framework.** Medusa draws a parallel between environmental and social justice through ecofeminist values.

Yardira Ramirez plays the role of Medusa, the granddaughter of Gaia (the Earth) and Pontos (the sea stream) in Greek mythology. **Despite being rejected and persecuted, Medusa expresses gratitude to marine life by creating the coral on Earth.** By dying, she gives life to this fascinating and foundational endangered being – which is at once plant, animal and mineral. **This film is a metaphor for both the oppressed nature and women. At the same time, Medusa pays homage to those who know about their common belonging, their interconnection with all living things, and the intersectionality that drives them to live in harmony with their environment.**

As an activist artist involved in the cause of women and the Earth, my approach is social and political. **Provoking emotions by mixing dominated living world and the struggle of women is my way of committing myself to the construction of the narratives of tomorrow.** The link between the exploitation of natural resources and the exploitation of women is the common thread in my work. **I strive to deliver messages of hope. Believing in our own strength – and that of life itself – will make things change together.** Medusa is an anthology of ecofeminist thought in reaction to our situation in the face of climate change and the oppression of women around the world. The resulting political perspective is therefore revolutionary. A local and global peaceful revolution.



PHOTO CREDIT: NOAA (National Oceanic and Atmospheric Administration)

Theoretical Framework

"Ecofeminism is a movement that sees a connection between the exploitation and degradation of the natural world and the subordination and oppression of women. It emerged in the mid-1970s alongside second-wave feminism and the green movement. Ecofeminism brings together elements of the feminist and green movements, while at the same time offering a challenge to both. **It takes from the green movement a concern about the impact of human activities on the non-human world and from feminism the view of humanity as gendered in ways that subordinate, exploit and oppress women.**"-- From the introduction to "Feminism & Ecology" by Mary Mellor, New York University Press, 1997.

Ecofeminism, also called ecological feminism, branch of feminism that examines the connections between women and nature. Its name was coined by French feminist Françoise d'Eaubonne in 1974. Ecofeminism uses the basic feminist tenets of equality between genders, a revaluing of non-patriarchal or nonlinear structures, and a view of the world that respects organic processes, holistic connections, and the merits of intuition and collaboration. To these notions ecofeminism adds both a commitment to the environment and an awareness of the associations made between women and nature. Specifically, this philosophy emphasizes the ways both nature and women are treated by patriarchal society. ***Ecofeminists examine the effect of gender categories in order to demonstrate the ways in which social norms exert unjust dominance over women and nature. The philosophy also contends that those norms lead to an incomplete view of the world, and its practitioners advocate an alternative worldview that values the earth as sacred, recognizes humanity's dependency on the natural world, and embraces all life as valuable.*** -- From Encyclopedia Britannica



PHOTO CREDIT: KALIE GRANIER

NOAA - National Oceanic and Atmospheric Administration

NOAA is an agency that enriches life through science. Their reach goes from the surface of the sun to the depths of the ocean floor as we work to keep the public informed of the changing environment around them. NOAA's mission to better understand our natural world and help protect its precious resources extends beyond national borders to monitor global weather and climate, and work with partners around the world.

Thierry Perez - CNRS

Thierry Perez is research director at CNRS, specializing **in marine ecology**. Adept at naturalistic and interdisciplinary approaches, **he conducts research programs and exploration campaigns for marine biodiversity in many regions of the world.**

David Gruber - National Geographic

David Gruber is a **marine biologist, coral reef and photosynthesis expert**, underwater photographer, submersible designer, professor at the City University of New York and, a **National Geographic explorer**.

Gruber was part of the team responsible for discovering that bromo-tryptophan-kynurenines make sharks fluorescent, and **this work was featured in The New York Times, National Geographic, Science Magazine, on PBS and on CNN.** That same year, Gruber and team were again featured in

an article in National Geographic for their discovery of flashlight fish schooling at night using their bioluminescent organs, which opened up the possibility that schooling fish may inhabit even the deep sea, and Gruber led the first study to apply advanced deep machine learning techniques to better detect and classify Sperm Whale bioacoustics.

Jorge Bachmann

Jorge Bachmann is a **San Francisco based Sound Artist** and curator. He has been involved in **San Francisco's experimental music/dance scene since the early 2000.**

Working across a wide range of explorations, Bachmann's work is eclectic, going from subtle "Musique Concrète" **Soundscapes to analog modular synth minimalism.**

Elise Rigot

Elise Rigot is a French artist-designer, who graduated from Boule School & ENS Paris-Saclay. She is a researcher in design at LAAS-CNRS & LLA-CRÉATIS. Her work explores sensitive knowledge of scientific practices which meet experience through design. She questions the techno-scientific imaginary with art and design. Her **hybrid & transdisciplinary approach mixes 3D technologies, media design & natural sciences to contribute to social and poetic emancipation to renew our view of our world.** A world that is both living and artificial. Rigot is also the author of the podcast, *Bio Is The New Black*, which explores ethical and critical issues through the design of bio-fabrication technologies and the founder of the open-science project *Corallum Fabrica*.



PHOTO CREDIT: ELISE RIGOT

Kalie Granier

Kalie Granier is a French **interdisciplinary artist** based in California. **Her artistic practice explores life below the surface and the interdependence between humans and non-humans through Eco-feminist values. She questions the links between our underwater environments, their ecosystems, and our human bodies in the new geological era to raise awareness of social and ecological imbalances, while imagining alternative narratives for a more equitable future.** Her research lies at the intersection of art, science, and activism, with a focus on marine plants and relies on a close dialogue between scientists and environmentalists. Her ecological commitment is omnipresent in her creative process as she experiments with video, performance, up-cycling of local natural material gleaned from the beach, and the use of raw pigments in earth-based painting. **Using emotions as a guideline, Kalie Granier pursues a quest for collective consciousness and regenerative togetherness.** She is the co-founder of Loud Spring, an Ecofeminist Art Tank based in San Francisco.

Kalie graduated (MA) from the ESAG, Penninghen School of Visual Art in Paris. Her work has been exhibited in several Galleries and Museums in the US and Europe, ProArts Gallery (Oakland California), The MAH Museum and Radius Gallery (Santa Cruz, California), 836M Gallery (San Francisco), Galerie Linz (Paris, France), and more recently at Museum Centre del Carme (Valencia, Spain), Es Baluard Museum (Palma, Sapin), Loop Festival (Barcelona, Spain) and LA NAU Cultural Center (University of Valencia, Spain)...

Master Degree School of Visual Art, ESAG Penninghen, Paris, France.

Professor and thesis advisor: **Étienne Robial**

2022

- . Symbiocene Exhibition – Gallery L'Été des Serpents – Arles, France – June/August
- . Solo Exhibition – Re.Riddle Gallery – San Francisco, USA – May/June
- . Screening Medusa and talk – Cabrillo College – Santa Cruz, USA – May 6th
- . POUSH Manifesto – Amphibies Exhibition – Paris, France – February

2021

- . POUSH Manifesto – Collective exhibition – Paris, France – November
- . Es Baluard – Contemporary Art Museum de Palma – Balears, Spain – July
- . Centro de Arte y Naturaleza Fundacion Bueas. Spain – May
- . Cabrillo College: Journal X – Santa Cruz, California – April
- . Society for Applied Anthropology (SfAA) – USA – March
- . Official Selections 2 FEET: Short to the Point, LA Independent Women Film Award, Imagine this Women's Film Festival, Environmental Film Festival...

2020

- . LOOP BARCELONA – Loop Festival – November
- . CCC Centre del Carme Cultura Contemporania – Collective Exhibition – Valencia, Spain
- . LA NAU Centre Cultural – Collective Exhibition – Valencia, Spain – October
- . Posidonia Green Festival – Barcelone, Spain – December
- . Foundation GoodPlanet – Paris – October
- . Art-Science Residency: MARITMA01
- . FEMMES D'ART (French Podcast)
- . Co-founder of LOUD SPRING, and Ecofeminist Art Tank of Ideas & Actions.
- . kasmé: Art Collaboration with the artist Esmeralda Da Costa. Paris/California

2019

- . 836M Gallery – Collective Exhibition – San Francisco – February
- . Santa Cruz Museum of Art & History (MAH Museum) – Santa Cruz, CA – March
- . Pro Arts Gallery – Oakland (CA) – October
- . RADIUS Gallery – Santa Cruz (CA) – September

2018

- . Curator of Pulsions – California
- . Workshop Foundation Luma – Arles – France

2017

- . R.Blitzer Gallery. Santa Cruz, California – Solo Exhibition, Women's Swim Curated by Gabrielle Haugen – First Friday November 3rd
- . AUCTION by Cornette de Saint Cyr – Paris – 5th of April

2016

- . Cheloudiakoff Gallery. Solo Exhibition, Odyssey – Belfort, France – September
- . askART – askART, Fine Art Prices, Auction Records
- . MutualArt –

2015

- . FONDATION LA MOUCHE: 5th season» with Robert Schad & Anne Delfieu – July
- . CNAP (Centre National des Arts Plastiques)

2014

- . Art Élysées. FIAC 2014 LE « OFF ». Paris. October
- . Linz Gallery. Solo Exhibition – Paris. June
- . Art Residency. Song-zhuang, Beijing. China. April
- . Dock Sud Gallery

2013

- . Art Élysées. FIAC 2013 LE « OFF ». Paris. October
- . OFF ART FAIR – in Brussels – site Tour and Taxi –
- . Drawing Now Paris. Town Hall of the 5th. Paris
- . Linz Gallery. 40, rue Quincampoix. 75004 Paris
- . French Union of Morocco. Essaouira

